1) linear probing

$h(k,i) = (h(k) + i) \% m$

$hash(k) = (3k+2) \% 8$

Index	Element
0	10
1	13
2	77
3	70
4	54
5	41
6	52
7	25

$hash(10) = 0$

$hash(41) = 5$

$hash(52) = 6$

$hash(25) = 5$, $h(25,1) = 6$, $h(25,2) = 7$

$hash(13) = 1$

$hash(77) = 1$, $h(77,1) = 2$

$hash(54) = 4$

$hash(70) = 4$, $h(70,1) = 5$

2) Quadratic probing

$h(k,i) = (h(k) + i^2) \% m$

$h(k) = (3k+2) \% 8$

Index	element
0	10
1	25
2	13
3	35
4	42
5	41
6	52
7	92

$h(10) = 0$

$h(41) = 5$

$h(52) = 6$

$h(25) = 5$, $h(25,1) = 6$, $h(25,2) = 1$

$h(13) = 1$, $h(13,1) = 2$

$h(42) = 0$, $h(42,1) = 1$, $h(42,2) = 4$

$h(35) = 3$

$h(92) = 6$, $h(92,1) = 7$

3) Double hashing

$h(k,i) = (h_1(k) + i\,h_2(k)) \% m$

$h_1(k) = k \% 8$

$h_2 = ((5k + 3) \% 7) + 1$

Index	Element
0	80
1	44
2	14
3	53
4	50
5	23
6	22
7	39

$h_1(22) = 6$
$h_1(14) = 6,\ h(14,1) = 2$
$h_1(39) = 7$
$h_1(23) = 7,\ h(23,1) = 6,\ h(23,2) = 5$
$h_1(80) = 0$
$h_1(53) = 5,\ h(53,1) = 0,\ h(53,2) = 3$
$h_1(44) = 1$
$h_1(50) = 2,\ h(50,1) = 3,\ h(50,2) = 4$

4) Cuckoo hashing

$h_1(k) = (3k + 1) \% 7$

$h_2(k) = (\lfloor 5k/2 \rfloor + 3) \% 7$

Index	Element
0	23
1	
2	47
3	87
4	15
5	20
6	

Index	Element
0	24
1	
2	
3	
4	9
5	12
6	

$h_1(9) = 0$
$h_1(23) = 0,\ h_2(9) = 4$
$h_1(24) = 3$
$h_1(15) = 4$
$h_1(87) = 3,\ h_2(24) = 0$
$h_1(20) = 5$
$h_1(12) = 2$
$h_1(47) = 2,\ h_2(12) = 5$